HT-02-014

November 18, 2003

To: Commissioner for Patents
P.O.Box 1450
Alexandria, VA 22313-1450

Fr: George O. Saile, Reg. No. 19,572
28 Davis Avenue
Poughkeepsie, N.Y. 12603

Subject: Serial No. 10/647,716 08/25/03

Tai Min et al.

MAGNETIC RANDOM ACCESS MEMORY DESIGNS WITH CONTROLLED MAGNETIC SWITCHING MECHANISM

Grp. Art Unit:

INFORMATION DISCLOSURE STATEMENT

Enclosed is Form PTO-1449, Information Disclosure Citation In An Application.

The following Patents and/or Publications are submitted to comply with the duty of disclosure under CFR 1.97-1.99 and 37 CFR 1.56. Copies of each document is included herewith.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on November 21, 2003.

Stephen B. Ackerman, Reg.# 37761

Signature/Date 11/21/03

U.S. Patent 6,242,770 to Bronner et al., "Diode Connected to a Magnetic Tunnel Junction and Self Aligned with a Metallic Conductor and Method for Forming the Same," teaches a method for forming thin film conductors as word and bit lines so that the MTJ device is in close proximity to a lower line and a diode is located below that line.

U.S. Patent 5,757,695 to Shi et al., "MRAM with Aligned Magnetic Vectors," teaches the formation of an ellipsoidal MTJ cell wherein the magnetization vectors are aligned along the length (major axis) of the cell and which do not present variously oriented edge domains, high fields and poles at the ends of the element.

U.S. Patent 6,205,053 to Anthony, "Magnetically Stable Magnetoresistive Memory Element," teaches the formation of an MTJ device having first and second layers which are substantially "H" and "I" shaped.

U.S. Patent 6,005,800 to Koch et al., "Magnetic Memory Array with Paired Asymmetric Memory Cells for Improved Write Margin," teaches the formation of cells with two shapes, which are mirror images of each other.

U.S. Patent Application HT-02-015, Serial No. 10/650,600, filed 08/28/03, assigned to the same assignee as the current invention, discusses the use of magnetic tunnel junctions (MTJ) as storage elements (cells) in non-volatile memory cell arrays, called magnetic random access memories (MRAM).

Sincerely,

Stephen B. Ackerman,
Reg. No. 37761

Form PTO-1449

INFORMATION DISCLOSURE CITATION IN AN APPLICATION

(Use several sheets if necessary)

Docket Number (Optional)	Application Number
HT-02-014	10/647,716
Applicant: Tai Min et al.	
Filing Date: 08/25/03	Group Art Unit:

U. S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	6,242,770	6/5/01	Bronner et al.	257	295	8/31/98
	5,757,695	5/26/98	Shi et al.	365	158	2/5/97
	6,205,053	3/20/01	Anthony	365	173	6/20/00
	6,005,800	12/21/99	Koch et al.	365	173	11/23/98

FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation YES	Translation NO

OTHER DOCUMENTS *(Including Author, Title, Date, Pertinent Pages, Etc.)*

U.S. Patent Application HT-02-015, Serial No. 10/650,600, filed 08/28/03, assigned to the same assignee.

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.